

August 28, 2012

Mr. Mark Nations
The Doe Run Company
P.O. Box 1633
Desloge, Missouri 63601

Re: Ambient Air Monitoring Report – Rivermines Site

Dear Mr. Nations:

Please find attached the June 2012 "*Ambient Air Monitoring Report*" for The Doe Run Company at the Rivermines Sites, located near Park Hills, Missouri.

This report will include the following:

- **Glossary of Terms** – Listing of the abbreviations used for each parameter and unit.
- **Ambient Air Quality Standards** – Lists the maximum allowable concentrations for the measured parameters.
- **TSP, Lead & PM₁₀ Particulate Summaries** – Includes the averages of each monitored parameter, which relates to the federal standards.
- **Particulate and Lead Analysis Spreadsheets**.
- **Lab Results (lead & cadmium)** – Lab reports from Inovatia Laboratories, LLC.
- **Meteorological Data Printouts** – This supplies printouts of each parameter.

Barr Engineering Company offers this report as an independent laboratory. This includes the weighing of filters, obtaining lead and cadmium analysis, compiling the data, and preparing the report. No interpretation of the data or analysis of the results is implied or intended. Should you have any questions regarding this report, please call.

Respectfully,

A handwritten signature in black ink that reads "Richard J. Campbell".

Richard J. Campbell, PE
Chemical Engineer
Senior Environmental Consultant

c: Kathy Rangen
Jason Gunter
Ty Morris

07CR

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Superfund

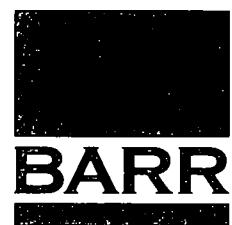
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Ambient Air Monitoring Report

***Rivermines
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

June 2012



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SUPERFUND DIVISION

Ambient Air Monitoring Report

***Rivermines
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

June 2012



1001 Diamond Ridge Suite 1100

Jefferson City, MO 65109

Phone: (573) 638-5000

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GLOSSARY OF TERMS

$\mu\text{g}/\text{m}^3$	Micrograms per Cubic Meter
mph	Miles per Hour
Wind Direction	Degrees from True North
TSP	Total Suspended Particulate
PM ₁₀	Particulate Matter - 10 Microns or Less
mmHg	Millimeters of Mercury

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

PM ₁₀ – Particulate Matter	24-Hour*	Annual Maximum	150 $\mu\text{g}/\text{m}^3$
Lead	Calendar Quarter	Arithmetic Mean	1.5 $\mu\text{g}/\text{m}^3$
Lead	Rolling 3-Month Average	Arithmetic Mean	0.15 $\mu\text{g}/\text{m}^3$

TSP (Total Suspended Particulate) – There are no Federal Standards that apply solely for TSP.

*This standard must be exceeded more than once a year to constitute a violation.



TSP and Lead Concentration Summary

Rivermines
Park Hills, Missouri

2012

Date	TSP Big River #4 ($\mu\text{g}/\text{m}^3$)	TSP South #1 ($\mu\text{g}/\text{m}^3$)	TSP North #2 ($\mu\text{g}/\text{m}^3$)	TSP East #3 ($\mu\text{g}/\text{m}^3$)	LEAD Big River #4 ($\mu\text{g}/\text{m}^3$)	LEAD South #1 ($\mu\text{g}/\text{m}^3$)	LEAD North #2 ($\mu\text{g}/\text{m}^3$)	LEAD East #3 ($\mu\text{g}/\text{m}^3$)
6/1/12	31	84	13	16	0.039	0.150	0.014	0.013
6/4/12	70	68	25	30	0.053	0.186	0.007	0.020
6/5/12	38	37	26	34	0.018	0.062	0.000	0.025
6/6/12	37	65	23	29	0.014	0.270	0.009	0.038
6/7/12	39	35	26	37	0.020	0.055	0.007	0.039
6/8/12	38	34	28	37	0.033	0.062	0.042	0.074
6/11/12	21	43	21	20	0.012	0.132	0.013	0.000
6/12/12	50	60	26	27	0.045	0.179	0.006	0.011
6/13/12	40	32	33	25	0.021	0.042	0.009	0.012
6/14/12	51	29	29	28	0.057	0.011	0.021	0.013
6/15/12	33	29	29	36	0.017	0.008	0.090	0.017
6/18/12	32	29	39	33	0.000	0.000	0.256	0.009
6/19/12	27	23	29	27	0.007	0.000	0.203	0.016
6/20/12	29	26	45	31	0.012	0.000	0.281	0.011
6/21/12	59	69	26	34	0.098	0.203	0.053	0.050
6/22/12	33	34	24	27	0.031	0.047	0.009	0.010
6/25/12	50	55	35	42	0.028	0.260	0.011	0.024
6/26/12	40	38	25	36	0.028	0.018	0.000	0.018
6/27/12	35	36	32	50	0.016	0.014	0.026	0.029
6/29/12	72	75	40	65	0.069	0.085	0.014	0.096
Monthly Average	41	45	29	33	0.031	0.089	0.054	0.026
May 2012					0.024	0.135	0.031	0.029
Apr 2012					0.016	0.083	0.009	0.016
Rolling 3-month Average					0.02	0.10	0.03	0.02
					3-month Average Lead NAAQS $\mu\text{g}/\text{m}^3$			
					0.15			

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.



Particulate Summary

Rivermines
Park Hills, Missouri

2012

Date	PM ₁₀ Big River #4 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ South #1 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ North #2 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ East #3 ($\mu\text{g}/\text{m}^3$)	PM ₁₀ NAAQS ($\mu\text{g}/\text{m}^3$)
2-Jun	9	8	8	7	150
5-Jun	16	24	12	14	150
8-Jun	21	24	19	19	150
11-Jun	18	43	13	14	150
14-Jun	20	16	17	14	150
17-Jun	14	12	12	11	150
20-Jun	14	13	19	13	150
23-Jun	18	15	14	15	150
26-Jun	18	26	14	14	150
29-Jun	33	41	31	36	150
Monthly Average	18	22	16	16	

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.

Particulate and Lead Analysis



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P4557

Big River Site #4- Primary

Sample Date 2012	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. μg	T_{av} C	P_{av} mmHg	P_f mmHg	Ratio P_f/P_{av}	Q_a m^3/min	Q_{std} m^3/min	Elapsed Time hr	Sample Volume V_{std} m^3	Mass Concentrations TSP $\mu\text{g}/\text{m}^3$	Lead $\mu\text{g}/\text{m}^3$
6/1/2012	8540313	0.0557	68	14	742.6	34.8	0.953	1.228	1.245	23.68	1769	31	0.039
6/4/2012	8540304	0.1208	91	24	739.7	36.1	0.951	1.245	1.213	23.69	1724	70	0.053
6/5/2012	8593195	0.0652	32	21	741.9	35.7	0.952	1.240	1.225	23.59	1734	38	0.018
6/6/2012	8593187	0.0652	25	19	744.4	35.4	0.952	1.236	1.236	23.68	1757	37	0.014
6/7/2012	8593176	0.0679	35	19	746.3	35.4	0.953	1.237	1.239	23.68	1760	39	0.020
6/8/2012	8593164	0.0655	57	22	745.2	35.8	0.952	1.240	1.230	23.51	1735	38	0.033
6/11/2012	8593158	0.0360	20	21	742.4	35.7	0.952	1.240	1.225	23.66	1739	21	0.012
6/12/2012	8593149	0.0869	79	22	746.0	35.7	0.952	1.240	1.231	23.67	1749	50	0.045
6/13/2012	8593139	0.0696	37	20	746.1	35.5	0.952	1.238	1.236	23.66	1755	40	0.021
6/14/2012	8593129	0.0885	99	22	744.8	35.9	0.952	1.242	1.227	23.72	1746	51	0.057
6/15/2012	8593120	0.0579	30	25	744.7	36.1	0.951	1.246	1.221	23.65	1733	33	0.017
6/18/2012	8593110	0.0541	< 10	28	741.1	36.6	0.951	1.251	1.207	23.55	1705	32	0.000
6/19/2012	8593101	0.0458	11	28	743.9	36.5	0.951	1.250	1.212	23.65	1720	27	0.007
6/20/2012	8593492	0.0494	21	28	744.9	36.5	0.951	1.251	1.213	23.73	1728	29	0.012
6/21/2012	8593483	0.1018	167	26	744.3	36.3	0.951	1.247	1.218	23.46	1715	59	0.098
6/22/2012	8593476	0.0579	54	24	744.3	36.1	0.952	1.245	1.221	23.69	1736	33	0.031
6/25/2012	8593464	0.0852	48	28	741.9	36.5	0.951	1.250	1.209	23.64	1714	50	0.028
6/26/2012	8593454	0.0691	48	22	743.1	35.8	0.952	1.241	1.224	23.53	1728	40	0.028
6/27/2012	8593446	0.0603	27	27	742.9	36.4	0.951	1.249	1.213	23.74	1728	35	0.016
6/29/2012	8593437	0.1222	118	32	741.7	37.0	0.950	1.257	1.198	23.74	1707	72	0.069

Data Captured	TSP	Lead
Valid Samples:	20	20
Scheduled Samples:	20	20
Percent Data Captured:	100%	100%

Monthly Average:	41	0.031
Standard Deviation:	14	0.024
Maximum:	72	0.098
Minimum:	21	0.000

NOTES

6/28/2012 - Training - No samples scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius

P_{av} = average station pressure in millimeters of mercury

P_f = $((\text{Temp in } ^\circ\text{K} * \text{Temp Slope}) + \text{Temp Int.}) * 1.866$

P_t = $((\text{Temp in } ^\circ\text{K} * 0.0664) + (-0.4213)) * 1.866$

P_f/P_{av} = pressure ratio of P_f and P_{av} = $1 - P_f/P_{av}$

Q_a = look up table volumetric flow rate

Q_{std} = total sample volumetric flow rate corrected to standard conditions

V_{std} = total sample volume corrected to standard conditions

TSP = mass concentration in $\mu\text{g}/\text{std m}^3$

Lead = mass concentration in $\mu\text{g}/\text{std m}^3$



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P2940

Elvins Rivermines Site #1 by Office

Sample Date	Filter ID	TSP Filter Net Wt. g	Lead Total Wt. μg	T_{av} C	P_{av} mmHg	P_f mmHg	Ratio P_f/P_a	Q_a m^3/min	Q_{std} m^3/min	Elapsed Time hr	Sample Volume V_{std} m^3	Mass Concentrations TSP $\mu\text{g}/\text{m}^3$	Lead $\mu\text{g}/\text{m}^3$
6/1/2012	8540310	0.1506	268	14	742.6	34.8	0.953	1.234	1.251	23.90	1793	84	0.150
6/4/2012	8540301	0.1179	323	24	739.7	36.1	0.951	1.251	1.219	23.79	1740	68	0.186
6/5/2012	8593192	0.0656	108	21	741.9	35.7	0.952	1.245	1.230	23.71	1750	37	0.062
6/6/2012	8593184	0.1160	478	19	744.4	35.4	0.952	1.241	1.242	23.76	1770	65	0.270
6/7/2012	8593173	0.0628	99	19	746.3	35.4	0.953	1.242	1.244	23.89	1783	35	0.055
6/8/2012	8593167	0.0593	110	22	745.2	35.8	0.952	1.246	1.235	23.79	1763	34	0.062
6/11/2012	8593155	0.0761	232	21	742.4	35.7	0.952	1.246	1.231	23.84	1760	43	0.132
6/12/2012	8593146	0.1047	313	22	746.0	35.7	0.952	1.246	1.237	23.61	1752	60	0.179
6/13/2012	8593136	0.0561	75	20	746.1	35.5	0.952	1.243	1.242	23.87	1778	32	0.042
6/14/2012	8593126	0.0514	19	22	744.8	35.9	0.952	1.248	1.233	23.92	1769	29	0.011
6/15/2012	8593117	0.0511	15	25	744.7	36.1	0.951	1.251	1.227	23.84	1755	29	0.008
6/18/2012	8593107	0.0494	< 10	28	741.1	36.6	0.951	1.257	1.212	23.64	1720	29	0.000
6/19/2012	8593498	0.0392	< 10	28	743.9	36.5	0.951	1.256	1.218	23.74	1735	23	0.000
6/20/2012	8593489	0.0456	< 10	28	744.9	36.5	0.951	1.257	1.219	23.82	1742	26	0.000
6/21/2012	8593480	0.1217	357	26	744.3	36.3	0.951	1.253	1.224	23.88	1753	69	0.203
6/22/2012	8593470	0.0605	83	24	744.3	36.1	0.952	1.251	1.227	23.91	1761	34	0.047
6/25/2012	8593461	0.0955	451	28	741.9	36.5	0.951	1.256	1.214	23.80	1734	55	0.260
6/26/2012	8593451	0.0668	31	22	743.1	35.8	0.952	1.247	1.230	23.56	1739	38	0.018
6/27/2012	8593443	0.0633	24	27	742.9	36.4	0.951	1.254	1.219	23.71	1734	36	0.014
6/29/2012	8593434	0.1298	147	32	741.7	37.0	0.950	1.263	1.203	23.81	1719	75	0.085

Data Captured	TSP	Lead
Valid Samples:	20	20
Scheduled Samples:	20	20
Percent Data Captured:	100%	100%

Monthly Average:	45	0.089
Standard Deviation:	19	0.089
Maximum:	84	0.270
Minimum:	23	0.000

NOTES

6/28/2012 - Training - No samples scheduled

DEFINITIONS and CALCULATIONS

$$\begin{aligned}T_{av} &= \text{average temperature in degrees Celsius} \\P_{av} &= \text{average station pressure in millimeters of mercury} \\P_t &= ((Temp \text{ in Kelvin} * Temp Slope) + Temp Int.) * 1.868 \\P_t &= ((Temp \text{ in Kelvin} * 0.0664) - (0.4213)) * 1.868 \\P/P_{av} &= \text{pressure ratio of } P_t \text{ and } P_{av} = 1 - P_t/P_{av}\end{aligned}$$

Q_a = look up table volumetric flow rate
Q_{std} = total sample volumetric flow rate corrected to standard conditions
V_{std} = total sample volume corrected to standard conditions
TSP = mass concentration in $\mu\text{g}/\text{std m}^3$
Lead = mass concentration in $\mu\text{g}/\text{std m}^3$



TSP and Lead Analysis

The Doe Run Company

Sampler ID P2941		Elvins Rivermines Site #2 Wood & Barton												
Sample Date	Filter ID	TSP	Lead	T _{av}	P _{av}	P _t	Ratio	Q _a	Q _{std}	Elapsed Time	Sample Volume	Mass Concentrations		
		Filter Net Wt.	Total Wt.								V _{std}	m ³	TSP	Lead
		g	μg	C	mmHg	mmHg	P _a /P _a	m ³ /min	m ³ /min	hr			μg/m ³	μg/m ³
6/1/2012	8540312	0.0236	24	14	742.6	34.8	0.953	1.217	1.234	23.73	1757	13	0.014	
6/4/2012	8540303	0.0428	12	24	739.7	36.1	0.951	1.234	1.202	23.75	1713	25	0.007	
6/5/2012	8593194	0.0449	< 10	21	741.9	35.7	0.952	1.229	1.214	23.80	1734	26	0.000	
6/6/2012	8593186	0.0411	15	19	744.4	35.4	0.952	1.224	1.225	23.81	1750	23	0.009	
6/7/2012	8593175	0.0462	13	19	746.3	35.4	0.953	1.225	1.227	23.76	1749	26	0.007	
6/8/2012	8593165	0.0482	73	22	745.2	35.8	0.952	1.230	1.219	23.81	1742	28	0.042	
6/11/2012	8593157	0.0370	23	21	742.4	35.7	0.952	1.229	1.214	23.86	1739	21	0.013	
6/12/2012	8593148	0.0454	10	22	746.0	35.7	0.952	1.230	1.221	23.82	1744	26	0.006	
6/13/2012	8593138	0.0585	15	20	746.1	35.5	0.952	1.226	1.225	23.82	1751	33	0.009	
6/14/2012	8593128	0.0503	36	22	744.8	35.9	0.952	1.231	1.216	23.83	1739	29	0.021	
6/15/2012	8593119	0.0494	155	25	744.7	36.1	0.951	1.235	1.210	23.82	1730	29	0.090	
6/18/2012	8593109	0.0666	434	28	741.1	36.6	0.951	1.240	1.197	23.56	1692	39	0.256	
6/19/2012	8593500	0.0499	349	28	743.9	36.5	0.951	1.240	1.202	23.83	1719	29	0.203	
6/20/2012	8593491	0.0766	481	28	744.9	36.5	0.951	1.240	1.203	23.74	1714	45	0.281	
6/21/2012	8593482	0.0439	91	26	744.3	36.3	0.951	1.236	1.207	23.76	1721	26	0.053	
6/22/2012	8593472	0.0420	16	24	744.3	36.1	0.952	1.234	1.211	23.78	1727	24	0.009	
6/25/2012	8593463	0.0598	19	28	741.9	36.5	0.951	1.240	1.198	23.79	1711	35	0.011	
6/26/2012	8593453	0.0428	< 10	22	743.1	35.8	0.952	1.231	1.214	23.56	1716	25	0.000	
6/27/2012	8593445	0.0555	44	27	742.9	36.4	0.951	1.238	1.203	23.76	1715	32	0.026	
6/29/2012	8593436	0.0685	23	32	741.7	37.0	0.950	1.246	1.187	23.87	1701	40	0.014	

Data Captured	TSP	Lead
Valid Samples:	20	20
Scheduled Samples:	20	20
Percent Data Captured:	100%	100%

Monthly Average:	29	0.054
Standard Deviation:	7	0.087
Maximum:	45	0.281
Minimum:	13	0.000

NOTES

6/28/2012 - Training - No samples scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius

P_{av} = average station pressure in millimeters of mercury

$$P_f = (((\text{Temp in } ^\circ\text{Kelvin} * \text{Temp Slope}) + \text{Temp Int.})) * 1.868$$

$$P_f = ((\text{Temp in } {}^\circ\text{Kelvin} * 0.0664) + (-0.4213)) * 1.868$$

P_f/P_{∞} = pressure ratio of P_f and $P_{\infty} \equiv 1 - P_f/P_{\infty}$

Q_a = look up table volumetric flow rate

Q_{std} = total sample volumetric flow rate corrected to standard conditions

V_{std} = total sample volume corrected to standard conditions

TSP = mass concentration in $\mu\text{g}/\text{std m}^3$

Lead = mass concentration in $\mu\text{g}/\text{std m}^3$



TSP and Lead Analysis

The Doe Run Company



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P6609

Big River Site #4 - QA

Valid Samples: 6 6

Monthly Average: 46 0.042

Scheduled Samples: 7 7

Standard Deviation: 13 0.030

Percent Data Captured: 86% 86%

Maximum: 63 0.089

Minimum: 28 0.008

NOTES

6/7/2012 - INVALID - Mechanical Failure - Timer Failed

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius

P_{av} = average station pressure in millimeters of mercury

$$P_f = (((\text{Temp in } {}^\circ\text{K} * \text{Temp Slope}) + \text{Temp Int.}) * 1.8) + 32$$

$$P_t = ((\text{Temp in } {}^\circ\text{Kelvin} * 0.0664) + (-0.4213)) * 1.868$$

$P_f/P_{f0} \equiv$ pressure ratio of P_f and $P_{f0} \equiv 1 - P_f/P_{f0}$

Q_a = look up table volumetric flow rate

Q_{std} = total sample volumetric flow rate corrected to standard conditions

V_{std} = total sample volume corrected to standard conditions

TSP = mass concentration in $\mu\text{g}/\text{std m}^3$

Lead = mass concentration in $\mu\text{g}/\text{std m}^3$

Lead = mass concentration in $\mu\text{g}/\text{std m}^3$



PM₁₀ Analysis

The Doe Run Company

Big River Site #4- Primary												
SAMPLER ID	P2952	PM10 Filter	Net Wt.	T _{av}	P _{av}	P _f	Ratio	Q _a	Q _{std}	Elapsed Time	Sample Volume V _{std}	Mass Conc. PM ₁₀ µg/m ³
Sample Date	Filter ID	g	C	mmHg	mmHg	P _o /P _a	m ³ /min	m ³ /min	hr	m ³	m ³	
6/2/2012	262243	0.0141	17	742.1	35.1	0.953	1.138	1.143	23.73	1627		9
6/5/2012	262234	0.0264	21	741.9	35.7	0.952	1.145	1.131	23.64	1605		16
6/8/2012	262224	0.0332	22	745.2	35.8	0.952	1.146	1.136	23.73	1618		21
6/11/2012	262214	0.0293	21	742.4	35.7	0.952	1.146	1.132	23.66	1607		18
6/14/2012	262205	0.0323	22	744.8	35.9	0.952	1.147	1.133	23.69	1611		20
6/17/2012	262895	0.0221	26	742.8	36.3	0.951	1.152	1.122	23.67	1593		14
6/20/2012	262886	0.0229	28	744.9	36.5	0.951	1.156	1.121	23.65	1591		14
6/23/2012	262874	0.0287	24	743.9	36.1	0.951	1.150	1.127	23.70	1603		18
6/26/2012	262866	0.0287	22	743.1	35.8	0.952	1.147	1.131	23.63	1604		18
6/29/2012	262856	0.0529	32	741.7	37.0	0.950	1.162	1.107	24.01	1595		33
Valid Samples:	10											
Scheduled Samples:	10											
Percent Data Captured:	100%											
Monthly Average:	18											
Standard Deviation:	6											
Maximum:	33											
Minimum:	9											
NOTES												
DEFINITIONS and CALCULATIONS												
T _{av}	= average temperature in degrees Celcius											
P _{av}	= average station pressure in millimeters of mercury											
P _f	= ((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868											
P _f	= ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868											
P _o /P _a	= pressure ratio of P _f and P _{av} = 1 - Pf/P _{av}											
Q _a	= look up table volumetric flow rate											
Q _{std}	= sample volumetric flow rate corrected to standard conditions											
V _{std}	= sample volume corrected to standard conditions											



PM₁₀ Analysis

The Doe Run Company

Elvins Rivermines Site #1 by Office																			
SAMPLER ID	P4601	PM10 Filter Net Wt.	T _{av}	P _{av}	P _f	Ratio	Q _a	Q _{std}	Elapsed Time	Sample Volume	Mass Conc. PM ₁₀								
Sample Date	ID	g	C	mmHg	mmHg	P _o /P _a	m ³ /min	m ³ /min	hr	V _{std} m ³	µg/m ³								
6/2/2012	262246	0.0125	17	742.1	35.1	0.953	1.111	1.115	23.62	1580	8								
6/5/2012	262237	0.0381	21	741.9	35.7	0.952	1.118	1.104	23.62	1565	24								
6/8/2012	262227	0.0371	22	745.2	35.8	0.952	1.119	1.109	23.59	1570	24								
6/11/2012	262217	0.0682	21	742.4	35.7	0.952	1.118	1.105	23.64	1567	43								
6/14/2012	262208	0.0254	22	744.8	35.9	0.952	1.120	1.106	23.62	1568	16								
6/17/2012	262898	0.0191	26	742.8	36.3	0.951	1.125	1.096	23.64	1554	12								
6/20/2012	262889	0.0207	28	744.9	36.5	0.951	1.128	1.094	23.58	1548	13								
6/23/2012	262877	0.0231	24	743.9	36.1	0.951	1.122	1.100	23.61	1559	15								
6/26/2012	262869	0.0404	22	743.1	35.8	0.952	1.119	1.104	23.62	1564	26								
6/29/2012	262859	0.0629	32	741.7	37.0	0.950	1.133	1.080	23.67	1534	41								
Valid Samples: 10				Monthly Average: 22															
Scheduled Samples: 10				Standard Deviation: 12															
Percent Data Captured: 100%				Maximum: 43															
				Minimum: 8															
NOTES																			
DEFINITIONS and CALCULATIONS																			
T _{av} = average temperature in degrees Celcius				P _o /P _a = pressure ratio of P _f and P _{av} = 1 - Pf/P _{av}															
P _{av} = average station pressure in millimeters of mercury				Q _a = look up table volumetric flow rate															
P _f = ((Temp in °Kelvin * Temp Slope)+Temp Int.)*1.868				Q _{std} = sample volumetric flow rate corrected to standard conditions															
P _f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868				V _{std} = sample volume corrected to standard conditions															



PM₁₀ Analysis

The Doe Run Company

Sampler ID P4507		Elvins Rivermines Site #2 Wood & Barton												
Sample Date 2012	Filter ID	PM10 Filter Net Wt. g	T _{av} C	P _{av} mmHg	P _f mmHg	Ratio P _o /P _a	Q _a m ³ /min	Q _{std} m ³ /min	Elapsed Time hr	Sample Volume V _{std} m ³	Mass Conc. PM ₁₀ µg/m ³			
6/2/2012	262244	0.0136	17	742.1	35.1	0.953	1.131	1.136	23.92	1630	8			
6/5/2012	262235	0.0200	21	741.9	35.7	0.952	1.138	1.125	23.93	1615	12			
6/8/2012	262225	0.0305	22	745.2	35.8	0.952	1.139	1.129	23.93	1621	19			
6/11/2012	262215	0.0215	21	742.4	35.7	0.952	1.139	1.125	23.92	1615	13			
6/14/2012	262206	0.0267	22	744.8	35.9	0.952	1.140	1.126	23.87	1613	17			
6/17/2012	262896	0.0189	26	742.8	36.3	0.951	1.145	1.116	23.98	1605	12			
6/20/2012	262887	0.0300	28	744.9	36.5	0.951	1.149	1.114	23.87	1596	19			
6/23/2012	262875	0.0228	24	743.9	36.1	0.951	1.143	1.120	23.92	1608	14			
6/26/2012	262867	0.0225	22	743.1	35.8	0.952	1.140	1.124	23.95	1615	14			
6/29/2012	262857	0.0491	32	741.7	37.0	0.950	1.155	1.100	24.01	1585	31			
Valid Samples: 10														
Scheduled Samples: 10														
Percent Data Captured: 100%														
									Monthly Average: 16					
									Standard Deviation: 6					
									Maximum: 31					
									Minimum: 8					
NOTES														
DEFINITIONS and CALCULATIONS														
T _{av} = average temperature in degrees Celcius						P _o /P _a = pressure ratio of P _f and P _{av} = 1 - P _f /P _{av}								
P _{av} = average station pressure in millimeters of mercury						Q _a = look up table volumetric flow rate								
P _f = ((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868						Q _{std} = sample volumetric flow rate corrected to standard conditions								
P _f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868						V _{std} = sample volume corrected to standard conditions								



PM₁₀ Analysis

The Doe Run Company

Elvins Rivermines Site #3 WTP											
Sampler ID	P2951	PM10 Filter Net Wt.	T _{av}	P _{av}	P _f	Ratio	Q _a	Q _{std}	Elapsed Time	Sample Volume V _{std}	Mass Conc. PM ₁₀ µg/m ³
Sample Date	Filter ID	g	C	mmHg	mmHg	P _o /P _a	m ³ /min	m ³ /min	hr	m ³	µg/m ³
6/2/2012	262245	0.0116	17	742.1	35.1	0.953	1.140	1.144	23.49	1612	7
6/5/2012	262236	0.0224	21	741.9	35.7	0.952	1.146	1.133	23.45	1594	14
6/8/2012	262226	0.0306	22	745.2	35.8	0.952	1.147	1.137	23.49	1603	19
6/11/2012	262216	0.0218	21	742.4	35.7	0.952	1.147	1.133	23.46	1595	14
6/14/2012	262207	0.0230	22	744.8	35.9	0.952	1.148	1.134	23.44	1595	14
6/17/2012	262897	0.0177	26	742.8	36.3	0.951	1.154	1.123	23.48	1583	11
6/20/2012	262888	0.0202	28	744.9	36.5	0.951	1.157	1.122	23.41	1576	13
6/23/2012	262876	0.0232	24	743.9	36.1	0.951	1.151	1.128	23.52	1592	15
6/26/2012	262868	0.0223	22	743.1	35.8	0.952	1.148	1.132	23.51	1597	14
6/29/2012	262858	0.0561	32	741.7	37.0	0.950	1.163	1.108	23.57	1567	36
Valid Samples:	10										
Scheduled Samples:	10										
Percent Data Captured:	100%										
Monthly Average:	16										
Standard Deviation:	8										
Maximum:	36										
Minimum:	7										

NOTES

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius
P_{av} = average station pressure in millimeters of mercury
P_f = ((Temp in °Kelvin * Temp Slope)+Temp Int.)*1.868
P_f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868

P_o/P_a = pressure ratio of P_f and P_{av} = 1 - P_f/P_{av}
Q_a = look up table volumetric flow rate
Q_{std} = sample volumetric flow rate corrected to standard conditions
V_{std} = sample volume corrected to standard conditions



PM₁₀ Analysis

The Doe Run Company

Lab Results (Lead and Cadmium)



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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0588
Date Received: 06/21/12
Analysis Method: 40 CFR §50
Appendix G

Location	Elvins River Mines
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Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123022	8540310	06/01/12	#1 South - Office	268	< 10	06/29/12 - DS
123023	8540312	06/01/12	#2 North - W&B	24	< 10	06/29/12 - DS
123024	8540311	06/01/12	#3 East - WTP	22	< 10	06/29/12 - DS
123025	8540301	06/04/12	#1 South - Office	323	< 10	06/29/12 - DS
123026	8540303	06/04/12	#2 North - W&B	12	< 10	06/29/12 - DS
123027	8540302	06/04/12	#3 East - WTP	35	< 10	06/29/12 - DS
123028	8593192	06/05/12	#1 South - Office	108	< 10	06/29/12 - DS
123029	8593194	06/05/12	#2 North - W&B	< 10	< 10	06/29/12 - DS
123030	8593193	06/05/12	#3 East - WTP	43	< 10	06/29/12 - DS
123031	8593184	06/06/12	#1 South - Office	478	< 10	06/29/12 - DS
123032	8593186	06/06/12	#2 North - W&B	15	< 10	06/29/12 - DS
123033	8593185	06/06/12	#3 East - WTP	66	< 10	06/29/12 - DS
123034	8593173	06/07/12	#1 South - Office	99	< 10	06/29/12 - DS
123035	8593175	06/07/12	#2 North - W&B	13	< 10	06/29/12 - DS
123036	8593174	06/07/12	#3 East - WTP	68	< 10	06/29/12 - DS
123037	8593167	06/08/12	#1 South - Office	110	< 10	06/29/12 - DS
123038	8593165	06/08/12	#2 North - W&B	73	< 10	06/29/12 - DS
123039	8593166	06/08/12	#3 East - WTP	128	< 10	06/29/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0608
Date Received: 06/27/12
Analysis Method: 40 CFR §50
Appendix G

Location Elvins River
Mines

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123148	8593155	06/11/12	#1 South - Office	232	< 10	07/09/12 - DS
123149	8593157	06/11/12	#2 North - W&B	23	< 10	07/09/12 - DS
123150	8593156	06/11/12	#3 East - WTP	< 10	< 10	07/09/12 - DS
123151	8593146	06/12/12	#1 South - Office	313	< 10	07/09/12 - DS
123152	8593148	06/12/12	#2 North - W&B	10	< 10	07/09/12 - DS
123153	8593147	06/12/12	#3 East - WTP	19	< 10	07/09/12 - DS
123154	8593136	06/13/12	#1 South - Office	75	< 10	07/09/12 - DS
123155	8593138	06/13/12	#2 North - W&B	15	< 10	07/09/12 - DS
123156	8593137	06/13/12	#3 East - WTP	21	< 10	07/09/12 - DS
123157	8593126	06/14/12	#1 South - Office	19	< 10	07/09/12 - DS
123158	8593128	06/14/12	#2 North - W&B	36	< 10	07/09/12 - DS
123159	8593127	06/14/12	#3 East - WTP	23	< 10	07/09/12 - DS
123160	8593117	06/15/12	#1 South - Office	15	< 10	07/09/12 - DS
123161	8593119	06/15/12	#2 North - W&B	155	< 10	07/12/12 - DS
123162	8593118	06/15/12	#3 East - WTP	29	< 10	07/12/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
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Edina, MN 55439-2330

Chain of Custody No.: 12-0623
Date Received: 07/03/12
Analysis Method: 40 CFR §50
Appendix G

Location Elvins River
Mines

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123265	8593107	06/18/12	#1 South - Office	< 10	< 10	07/13/12 - DS
123266	8593109	06/18/12	#2 North - W&B	434	< 10	07/13/12 - DS
123267	8593108	06/18/12	#3 East - WTP	15	< 10	07/13/12 - DS
123268	8593498	06/19/12	#1 South - Office	< 10	< 10	07/16/12 - DS
123269	8593500	06/19/12	#2 North - W&B	349	< 10	07/16/12 - DS
123270	8593499	06/19/12	#3 East - WTP	27	< 10	07/16/12 - DS
123271	8593489	06/20/12	#1 South - Office	< 10	< 10	07/16/12 - DS
123272	8593491	06/20/12	#2 North - W&B	481	< 10	07/16/12 - DS
123273	8593490	06/20/12	#3 East - WTP	18	< 10	07/16/12 - DS
123274	8593480	06/21/12	#1 South - Office	357	< 10	07/16/12 - DS
123275	8593482	06/21/12	#2 North - W&B	91	< 10	07/16/12 - DS
123276	8593481	06/21/12	#3 East - WTP	85	< 10	07/16/12 - DS
123277	8593470	06/22/12	#1 South - Office	83	< 10	07/16/12 - DS
123278	8593472	06/22/12	#2 North - W&B	16	< 10	07/13/12 - DS
123279	8593471	06/22/12	#3 East - WTP	18	< 10	07/13/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
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Chain of Custody No.: 12-0685
Date Received: 07/18/12
Analysis Method: 40 CFR §50
Appendix G

Location**Elvins River
Mines**

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123530	8593461	06/25/12	#1 South - Office	451	< 10	07/24/12 - DS
123531	8593463	06/25/12	#2 North - W&B	19	< 10	07/24/12 - DS
123532	8593462	06/25/12	#3 East - WTP	41	< 10	07/24/12 - DS
123533	8593451	06/26/12	#1 South - Office	31	< 10	07/24/12 - DS
123534	8593453	06/26/12	#2 North - W&B	< 10	< 10	07/24/12 - DS
123535	8593452	06/26/12	#3 East - WTP	30	< 10	07/24/12 - DS
123536	8593443	06/27/12	#1 South - Office	24	< 10	07/24/12 - DS
123537	8593445	06/27/12	#2 North - W&B	44	< 10	07/24/12 - DS
123538	8593444	06/27/12	#3 East - WTP	50	< 10	07/24/12 - DS
123539	8593434	06/29/12	#1 South - Office	147	< 10	07/24/12 - DS
123540	8593436	06/29/12	#2 North - W&B	23	< 10	07/24/12 - DS
123541	8593435	06/29/12	#3 East - WTP	161	< 10	07/24/12 - DS

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ANALYSIS REPORT

Client Information:

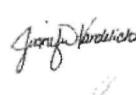
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Chain of Custody No.: 12-0588
Date Received: 06/21/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123014	8540313	06/01/12	#4 Primary	68	< 10	06/29/12 - DS
123015	8540304	06/04/12	#4 Primary	91	< 10	06/29/12 - DS
123016	8593195	06/05/12	#4 Primary	32	< 10	06/29/12 - DS
123017	8540314	06/05/12	#4 QA	31	< 10	06/29/12 - DS
123018	8593187	06/06/12	#4 Primary	25	< 10	06/29/12 - DS
123019	8593176	06/07/12	#4 Primary	35	< 10	06/29/12 - DS
123020	8593177	06/07/12	#4 QA	153	< 10	06/29/12 - DS
123021	8593164	06/08/12	#4 Primary	57	< 10	06/29/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
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Chain of Custody No.: 12-0608
Date Received: 06/27/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123141	8593158	06/11/12	#4 Primary	20	< 10	07/09/12 - DS
123142	8593149	06/12/12	#4 Primary	79	< 10	07/09/12 - DS
123143	8593159	06/12/12	#4 QA	76	< 10	07/09/12 - DS
123144	8593139	06/13/12	#4 Primary	37	< 10	07/09/12 - DS
123145	8593129	06/14/12	#4 Primary	99	< 10	07/09/12 - DS
123146	8593130	06/14/12	#4 QA	106	< 10	07/09/12 - DS
123147	8593120	06/15/12	#4 Primary	30	< 10	07/09/12 - DS

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
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Chain of Custody No.: 12-0623
Date Received: 07/03/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123258	8593110	06/18/12	#4 Primary	< 10	< 10	07/13/12 - DS
123259	8593101	06/19/12	#4 Primary	11	< 10	07/13/12 - DS
123260	8593111	06/19/12	#4 QA	14	< 10	07/13/12 - DS
123261	8593492	06/20/12	#4 Primary	21	< 10	07/13/12 - DS
123262	8593483	06/21/12	#4 Primary	167	< 10	07/13/12 - DS
123263	8593484	06/21/12	#4 QA	153	< 10	07/13/12 - DS
123264	8593476	06/22/12	#4 Primary	54	< 10	07/13/12 - DS

Submitted by:

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Date 2012.07.17 10:52:36
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ANALYSIS REPORT

Client Information:

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Chain of Custody No.: 12-0685
Date Received: 07/18/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

Lab No.	Filter ID	Date	Site	µg Pb/Filter	µg Cd/Filter	Date - Analyst
123525	8593464	06/25/12	#4 Primary	48	< 10	07/24/12 - DS
123526	8593454	06/26/12	#4 Primary	48	< 10	07/24/12 - DS
123527	8593465	06/26/12	#4 QA	54	< 10	07/24/12 - DS
123528	8593446	06/27/12	#4 Primary	27	< 10	07/24/12 - DS
123529	8593437	06/29/12	#4 Primary	118	< 10	07/24/12 - DS

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o=Inovatia Laboratories, LLC,
ou=Quality Assurance,
email=jvandelicht@inovatia.
com, c=US
Date: 2012.07.27 11:42:11
-05'00'

7/27/12

Date

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Meteorological Data

Meteorological Report
The Doe Run Company
Wind Speed

Site Name: Rivermines

Average Interval: 01 Hour

Units: mph

Sampling Frequency: 01 Second

Sum of WS	Hour	Wind Speed Data (mph)																								24 Hour Avg	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg
1-Jun	6.6	6.7	6.0	7.0	6.9	6.9	6.1	6.3	7.4	8.2	6.1	5.8	4.9	6.6	4.9	3.1	3.8	1.8	0.6	0.2	0.3	0.1	0.6	0.3	8.2	4.5	
2-Jun	0.9	0.0	1.2	0.2	0.2	0.4	0.4	1.2	2.0	2.3	3.9	4.2	3.6	3.6	3.8	4.2	3.4	2.0	1.0	0.6	0.1	0.1	0.4	1.0	4.2	1.7	
3-Jun	1.3	1.4	1.1	1.3	0.6	1.6	0.1	0.3	1.6	1.7	2.7	2.4	3.1	2.6	3.0	2.4	0.4	0.6	0.6	1.0	1.6	0.9	0.4	0.5	3.1	1.4	
4-Jun	0.1	0.6	0.8	1.4	0.8	0.1	0.7	1.4	1.5	2.2	3.2	2.9	3.1	3.5	3.1	4.6	3.8	3.0	3.8	4.1	5.3	4.5	2.9	1.7	5.3	2.5	
5-Jun	1.4	2.0	1.1	0.4	0.1	0.1	1.3	2.9	3.2	5.6	5.8	6.2	6.7	6.2	7.2	7.5	7.4	5.6	3.7	1.3	0.5	0.4	0.3	0.4	7.5	3.2	
6-Jun	0.1	0.4	0.8	0.2	0.0	0.4	1.9	2.5	3.4	5.6	5.0	5.7	6.2	6.4	5.9	5.4	5.1	4.2	2.3	0.2	0.2	0.1	0.0	0.1	6.4	2.6	
7-Jun	0.3	0.4	0.6	0.6	0.5	0.7	0.7	0.6	2.8	3.9	4.8	5.2	5.0	4.7	4.2	4.4	3.5	2.8	1.4	0.6	0.5	0.3	0.3	0.7	5.2	2.1	
8-Jun	0.7	0.4	0.5	0.4	1.1	1.3	0.5	0.3	1.2	3.7	4.7	4.7	4.8	4.5	4.0	4.4	3.0	4.0	3.4	2.8	3.5	3.0	2.4	0.1	4.8	2.5	
9-Jun	0.0	0.2	0.1	0.2	0.3	0.1	0.2	5.4	6.8	6.2	7.1	8.1	6.9	7.9	6.7	5.6	6.5	9.0	5.9	3.4	1.6	2.1	2.1	3.4	9.0	4.0	
10-Jun	3.9	4.0	2.8	2.5	3.1	3.3	5.0	5.7	5.9	5.9	5.9	6.1	6.7	6.0	7.2	6.2	7.8	6.9	7.0	5.2	4.9	4.5	4.5	1.5	7.8	5.1	
11-Jun	1.2	3.3	2.9	2.6	1.8	3.3	4.0	6.7	7.9	6.9	8.0	3.3	3.3	7.6	7.5	1.9	1.6	1.3	0.3	0.2	0.8	0.9	0.6	1.5	8.0	3.3	
12-Jun	0.5	0.2	0.5	0.5	2.1	3.0	3.9	3.9	5.0	6.3	5.9	5.6	5.7	6.6	6.8	7.3	6.5	6.0	5.5	0.9	0.6	0.3	0.6	0.0	7.3	3.5	
13-Jun	0.2	0.3	0.3	0.4	0.4	0.3	0.2	0.7	1.2	3.0	2.6	3.3	3.7	3.7	3.5	3.7	4.2	4.2	3.3	0.4	0.0	0.3	0.4	0.8	4.2	1.7	
14-Jun	0.4	0.0	0.8	0.0	0.9	0.7	0.3	1.9	2.1	4.1	4.5	3.8	4.6	5.0	5.0	5.3	4.6	4.4	3.7	2.4	3.5	3.2	1.0	0.2	5.3	2.6	
15-Jun	0.8	0.1	0.1	0.1	0.1	0.0	0.2	2.8	3.5	3.4	7.8	5.5	5.5	5.8	5.6	6.2	5.9	6.3	4.0	3.0	3.6	3.4	0.5	1.1	7.8	3.1	
16-Jun	0.2	0.7	2.3	1.6	3.2	3.8	4.3	6.1	6.9	6.2	6.9	7.0	7.0	8.2	7.9	9.0	10.6	9.3	9.2	7.0	4.8	5.8	4.8	3.9	10.6	5.7	
17-Jun	4.1	4.2	4.3	3.5	3.5	2.2	2.3	3.2	3.1	4.0	3.4	1.9	3.0	4.4	5.3	6.9	6.8	5.3	5.7	4.5	5.3	7.0	8.4	8.4	8.4	4.8	
18-Jun	6.6	6.8	6.0	5.8	7.5	6.9	5.1	5.9	8.0	7.5	9.4	9.8	10.1	11.4	11.3	11.7	10.5	9.7	9.3	8.2	8.6	7.6	8.0	7.2	6.3	11.7	8.2
19-Jun	6.1	6.1	5.2	4.2	3.8	4.0	6.1	8.6	9.8	10.9	10.3	10.9	10.8	10.2	10.1	10.6	10.0	9.4	7.8	6.1	4.3	3.1	2.7	4.2	10.9	7.3	
20-Jun	3.5	3.0	2.9	2.7	4.2	4.9	7.7	7.5	8.0	9.1	9.0	7.7	8.5	8.6	8.1	7.8	9.3	9.1	7.7	4.8	3.9	3.4	6.0	3.6	9.3	6.3	
21-Jun	2.1	0.6	0.7	0.2	0.5	0.6	2.3	4.5	5.1	8.1	4.4	4.8	8.3	7.6	5.6	5.5	6.3	5.9	3.9	3.8	2.1	0.3	0.2	0.3	8.3	3.5	
22-Jun	0.6	0.5	0.8	0.5	0.4	0.2	0.5	1.9	3.3	4.4	4.1	4.2	4.6	4.3	4.8	4.9	5.1	4.8	3.9	1.6	0.4	0.1	0.1	0.3	5.1	2.3	
23-Jun	0.3	0.6	0.6	0.1	0.1	0.4	0.2	0.8	3.5	2.6	2.6	3.1	3.9	3.2	3.5	3.9	5.1	4.3	2.6	1.4	1.0	0.5	0.1	0.0	5.1	1.8	
24-Jun	0.1	0.2	0.3	0.2	0.1	0.3	0.5	0.1	1.2	2.2	2.1	3.5	3.4	3.9	3.5	2.8	2.8	2.1	3.1	1.8	2.4	2.8	3.3	0.5	3.9	1.8	
25-Jun	0.1	0.7	0.8	0.3	0.5	1.1	0.7	1.4	6.0	5.4	5.9	6.1	6.4	7.0	7.2	7.4	6.8	7.6	5.4	4.3	5.3	2.8	1.2	0.4	7.6	3.8	
26-Jun	0.0	0.4	0.1	0.3	0.2	0.0	0.3	2.9	5.1	5.2	4.0	4.7	5.1	5.5	4.5	4.2	4.3	3.5	2.4	0.5	0.0	0.1	0.2	0.1	5.5	2.2	
27-Jun	0.0	0.1	0.1	0.0	0.1	0.1	0.7	4.8	5.3	4.6	4.3	4.4	3.8	3.8	3.8	4.0	4.9	5.9	4.9	3.0	4.0	4.1	2.8	2.7	5.9	3.0	
28-Jun	2.6	1.1	1.6	1.9	0.8	0.8	0.9	2.7	2.7	3.3	4.2	4.3	3.8	4.4	3.8	3.0	2.7	2.1	0.6	1.4	1.6	1.1	0.7	1.2	4.4	2.2	
29-Jun	1.3	0.8	1.6	1.2	1.3	1.1	0.8	0.9	2.8	2.7	3.0	3.1	3.6	3.4	3.7	3.8	5.3	5.2	3.6	3.0	2.3	4.1	1.3	0.3	5.3	2.5	
30-Jun	0.7	0.8	1.0	1.1	1.6	1.0	1.4	1.7	3.0	3.4	3.9	3.1	4.4	5.8	5.4	4.1	5.6	4.6	2.9	2.5	1.3	4.2	4.3	1.1	5.8	2.9	

 BARR	Maximum Hour//Monthly Average Total Hours In Month Valid Hours//Percent Data Captured
	11.7 720 720
	3.4 100.0%

Meteorological Report
The Doe Run Company
Wind Direction

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

Sampling Frequency: 01 Second

Sum of WD	Hour																									24 Hour Avg
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jun	323	331	327	331	323	325	326	319	324	324	312	305	301	324	311	293	305	285	279	187	184	185	179	211	288	
2-Jun	248	199	224	181	196	236	247	249	223	238	222	233	238	248	263	288	284	266	245	195	182	175	219	242	231	
3-Jun	237	233	234	180	179	223	240	298	231	254	241	223	56	234	233	238	213	211	340	161	209	17	242	187	213	
4-Jun	177	163	217	157	211	208	233	250	275	264	272	290	280	276	280	305	302	314	12	16	20	22	50	41	193	
5-Jun	16	16	15	186	179	200	4	8	5	5	20	20	25	22	16	12	13	16	23	49	70	187	186	172	61	
6-Jun	174	169	193	168	157	18	19	47	62	31	34	32	25	27	24	25	27	31	37	34	190	180	176	179	86	
7-Jun	191	192	199	189	210	227	243	282	17	36	84	33	33	46	47	27	40	62	23	74	185	180	175	179	123	
8-Jun	177	199	189	202	208	210	234	302	86	127	113	108	141	130	163	180	158	145	153	155	167	155	146	94	164	
9-Jun	309	172	185	184	193	186	265	168	177	175	180	186	189	197	191	166	165	179	179	187	169	183	172	166	188	
10-Jun	179	181	176	147	166	165	157	165	154	139	168	167	158	166	177	178	162	163	159	160	171	178	186	154	166	
11-Jun	165	172	179	176	170	192	196	215	214	222	328	18	191	198	183	267	271	253	259	225	201	241	245	229	209	
12-Jun	238	226	238	204	332	333	342	350	355	356	1	353	337	334	342	334	336	340	349	358	186	179	191	181	283	
13-Jun	172	166	160	174	193	230	210	247	21	87	49	342	356	36	50	80	89	92	108	107	260	184	184	202	158	
14-Jun	183	244	207	184	182	222	356	357	148	160	173	145	140	132	151	148	127	162	148	154	164	158	145	169	182	
15-Jun	23	348	146	171	164	207	133	168	188	202	188	183	157	149	164	160	171	183	191	159	174	179	188	173	174	
16-Jun	227	214	224	212	208	203	186	214	210	214	215	207	206	207	211	198	203	203	206	202	198	190	255	311	213	
17-Jun	180	216	216	212	224	223	215	238	240	234	229	282	240	212	232	203	204	212	193	185	179	186	192	195	214	
18-Jun	197	207	212	207	206	208	210	211	217	218	210	210	203	195	207	194	196	201	191	192	190	192	196	203	203	
19-Jun	193	188	190	186	172	191	207	203	204	206	201	197	196	191	194	197	190	184	188	183	177	173	167	168	189	
20-Jun	172	169	170	178	184	197	202	210	217	205	197	208	208	207	189	201	198	199	199	186	177	192	201	222	195	
21-Jun	230	245	232	215	218	210	228	224	227	208	251	298	323	334	330	330	341	347	329	337	323	210	204	190	266	
22-Jun	188	188	188	189	222	181	260	27	10	15	9	26	1	351	356	5	26	17	31	28	44	191	185	181	122	
23-Jun	178	176	174	183	173	206	311	157	115	102	114	359	28	358	40	101	84	107	84	78	116	190	185	234	161	
24-Jun	110	183	187	201	189	194	240	195	260	278	217	37	109	137	126	158	94	34	99	97	144	174	175	219	161	
25-Jun	204	196	203	208	237	248	254	280	349	7	16	23	15	17	17	17	20	14	21	24	24	32	31	54	105	
26-Jun	67	32	112	190	183	258	295	111	115	107	116	76	54	43	63	70	73	70	88	112	194	211	175	175	125	
27-Jun	191	319	176	189	305	180	164	170	182	182	173	211	208	223	243	201	199	208	203	187	193	218	233	224	207	
28-Jun	218	230	203	222	213	230	242	250	257	282	293	311	290	317	298	267	268	274	266	180	178	173	224	233	247	
29-Jun	231	207	230	217	187	237	287	273	285	276	274	269	325	235	236	231	231	225	224	204	207	210	255	227	241	
30-Jun	213	174	184	187	208	233	250	271	281	290	308	265	229	222	225	230	226	228	215	197	187	201	221	240	229	

	Total Hours in Month	720
	Valid Hours	720
	Percent Data Captured	100.0%

Meteorological Report

The Doe Run Company

$\Sigma \Theta$

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

Sum of Sig	Hour																									24 Hour Avg
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jun	22.0	21.3	19.6	19.8	22.7	20.5	24.2	31.0	27.1	24.9	38.8	38.8	42.5	34.7	37.8	41.9	36.4	39.8	25.1	4.2	2.9	2.9	11.7	10.4	25	
2-Jun	11.9	2.1	18.3	10.4	7.2	8.5	11.1	27.4	30.4	33.2	30.0	44.6	45.2	48.0	51.8	42.1	46.9	46.7	30.4	6.8	1.4	2.1	10.2	16.2	24	
3-Jun	18.4	20.4	19.9	17.4	14.4	25.1	8.8	18.2	38.3	44.2	39.2	41.2	39.1	37.8	24.7	23.7	7.2	9.3	11.3	7.8	13.6	37.4	31.4	13.6	23	
4-Jun	1.5	32.4	9.1	34.2	11.2	12.7	20.3	33.7	49.7	47.2	50.6	47.1	53.8	49.7	48.5	42.5	40.1	30.8	31.3	25.9	22.3	23.7	30.6	26.5	32	
5-Jun	18.3	15.4	14.5	3.8	1.8	5.2	18.3	22.3	36.7	25.8	33.3	29.9	32.1	31.9	27.1	24.8	26.0	23.5	20.8	26.4	16.5	10.0	4.3	2.8	20	
6-Jun	1.9	4.3	8.5	4.3	0.6	16.2	26.4	40.6	40.1	32.4	41.3	40.8	37.3	34.9	30.0	34.2	35.6	30.6	25.5	9.5	3.1	4.2	1.1	4.6	21	
7-Jun	7.7	10.8	13.4	8.0	11.1	18.7	24.6	34.4	29.9	42.0	40.2	45.7	43.7	43.8	43.7	37.8	40.3	37.5	17.9	9.3	4.4	1.5	1.8	6.6	24	
8-Jun	9.3	9.2	11.1	11.5	15.2	17.0	22.2	21.5	35.6	42.8	35.3	37.8	41.7	44.3	46.7	40.2	46.4	26.2	22.1	12.2	15.8	16.1	14.2	4.8	25	
9-Jun	0.9	2.1	1.8	4.6	10.5	5.9	17.4	31.5	23.4	27.6	28.2	30.2	28.9	26.9	27.4	23.4	24.6	24.2	21.6	18.1	10.8	18.6	21.2	19.0	19	
10-Jun	17.3	19.4	18.8	16.3	18.8	21.8	24.6	28.1	34.9	33.6	30.7	34.4	27.8	27.3	28.0	27.6	26.9	26.6	24.7	25.2	22.0	21.1	19.9	20.3	25	
11-Jun	23.9	22.6	25.4	22.0	19.1	21.4	20.9	22.2	23.6	27.8	33.1	36.0	33.8	22.0	40.5	50.2	45.6	27.6	16.6	12.1	13.4	17.1	18.5	18.3	26	
12-Jun	13.2	8.1	18.2	14.3	17.4	14.5	18.7	21.4	27.5	26.0	26.9	32.7	35.1	29.9	27.6	28.7	28.3	23.5	14.3	11.3	4.9	3.0	6.6	4.2	19	
13-Jun	6.9	6.2	4.7	6.2	6.7	15.8	15.1	35.8	50.1	43.0	46.3	37.1	40.3	45.9	39.4	44.0	36.9	32.0	29.2	10.8	6.0	19.5	4.6	13.7	25	
14-Jun	5.3	3.2	10.9	2.9	11.0	13.9	12.4	14.3	27.5	29.5	39.2	42.4	37.7	36.9	37.7	38.9	32.0	27.8	23.9	14.0	16.2	15.6	8.1	9.2	21	
15-Jun	13.8	3.2	4.4	0.7	3.1	3.2	11.2	26.0	27.9	31.5	28.2	37.4	32.4	34.7	30.9	24.9	25.4	24.8	19.5	15.5	16.8	18.4	10.7	13.5	19	
16-Jun	7.4	18.8	21.4	18.6	19.5	21.8	21.2	23.2	24.7	28.6	30.5	32.4	29.1	28.1	25.5	26.3	23.4	23.5	22.2	19.9	18.2	18.9	29.7	41.4	24	
17-Jun	24.1	24.9	22.2	20.7	20.4	22.2	22.1	26.3	33.7	34.3	42.3	47.1	38.0	29.3	29.9	22.7	23.8	23.1	20.1	16.4	18.1	21.0	20.1	20.3	26	
18-Jun	20.4	21.2	22.2	19.8	19.8	20.9	24.0	24.2	23.0	26.8	24.9	27.3	24.8	23.4	23.6	24.5	24.7	22.9	21.0	21.0	20.5	19.4	19.4	20.8	23	
19-Jun	19.5	20.8	20.8	19.0	18.9	20.4	23.5	24.2	22.8	25.5	25.4	25.9	26.2	25.6	25.9	24.4	24.5	20.7	20.5	19.8	16.6	16.6	18.3	22		
20-Jun	20.3	18.0	20.1	18.3	22.7	21.2	21.6	23.5	25.4	23.7	24.9	25.8	25.1	24.0	29.1	26.8	23.3	22.2	20.5	18.9	16.5	18.1	18.4	19.2	22	
21-Jun	19.4	16.5	16.0	14.3	12.8	11.1	26.4	25.8	28.2	23.0	45.6	44.4	27.5	23.2	27.3	27.6	26.1	22.1	21.8	18.8	19.7	7.5	9.6	3.7	22	
22-Jun	4.2	6.9	8.2	8.8	23.5	3.8	23.4	30.8	30.3	31.2	53.4	49.5	40.7	39.9	48.2	36.2	33.7	26.6	28.8	17.6	13.1	0.9	1.7	1.6	23	
23-Jun	2.2	4.5	7.4	3.9	1.9	9.0	12.8	33.3	28.3	38.9	55.0	59.4	45.1	49.2	37.9	38.5	31.4	29.1	30.4	21.4	23.2	4.5	1.5	0.9	24	
24-Jun	25.5	0.6	4.3	4.9	6.6	6.4	22.9	6.0	47.7	60.0	62.0	41.6	45.9	60.3	49.3	61.3	53.8	28.5	27.8	22.0	14.6	20.5	21.1	12.7	29	
25-Jun	15.6	10.6	22.7	8.1	11.9	17.9	14.8	31.2	23.7	24.9	28.8	32.4	29.1	30.2	29.8	26.5	29.9	22.9	25.4	23.0	24.8	30.9	23.3	12.5	23	
26-Jun	2.1	16.1	1.9	11.4	3.7	3.3	14.9	35.6	33.2	33.8	46.0	40.2	45.6	36.6	37.8	31.0	40.5	30.6	28.0	11.1	0.7	3.4	4.2	2.7	21	
27-Jun	1.2	3.7	1.4	2.3	9.0	4.2	17.4	26.8	29.1	36.3	43.2	44.7	48.4	68.2	51.4	49.5	33.0	25.3	18.5	17.0	17.2	22.8	19.0	15.2	25	
28-Jun	15.1	15.3	11.4	13.4	11.1	13.8	24.6	44.4	43.6	55.3	42.9	40.3	51.3	43.6	49.3	50.9	43.4	42.9	31.0	10.9	12.3	11.9	16.3	17.7	30	
29-Jun	19.8	21.4	23.3	25.8	18.4	23.5	23.2	39.7	51.3	50.3	56.8	60.3	55.8	60.5	58.4	41.2	32.1	26.0	21.4	12.7	15.2	23.8	27.7	9.1	33	
30-Jun	18.5	12.0	8.1	17.2	20.7	19.5	30.7	50.3	53.3	49.4	43.9	53.1	47.0	43.4	37.6	45.4	29.8	25.7	17.4	8.2	9.2	21.3	25.3	20.4	29	

BARR	Total Hours in Month	720
	Valid Hours	720
	Percent Data Captured	100.0%

Meteorological Report
The Doe Run Company
Temperature

Site Name: Rivermines

Average Interval: 01 Hour

Units: Deg. C

Sampling Frequency: 01 Second

Sum of Tem	Hour	24 Hour																									
		ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
1-Jun	11	11	11	11	11	10	11	13	14	14	16	17	18	19	19	19	19	19	18	17	14	12	11	9	8	19.2	14.1
2-Jun	9	8	8	7	7	8	10	12	15	18	20	22	24	25	26	26	26	26	25	24	19	17	15	14	14	26.4	16.7
3-Jun	14	13	13	12	11	13	18	22	26	28	29	29	30	30	28	27	26	24	23	21	21	20	20	18	30.1	21.5	
4-Jun	17	16	16	15	15	16	19	22	26	29	30	32	33	34	34	34	33	31	28	24	23	21	21	20	34.4	24.5	
5-Jun	19	18	17	15	14	15	18	20	22	24	25	26	26	27	27	27	27	26	25	23	21	17	15	14	27.4	21.3	
6-Jun	13	12	12	11	11	12	16	18	21	22	23	24	25	25	25	25	25	24	23	20	17	15	13	12	25.4	18.6	
7-Jun	11	10	10	9	9	10	14	19	22	24	24	25	26	26	27	27	27	27	25	22	18	16	14	13	27.2	19.0	
8-Jun	12	12	12	11	11	12	15	20	24	26	27	27	28	29	30	30	30	29	27	25	23	21	20	18	30.1	21.6	
9-Jun	16	14	13	13	13	14	19	23	25	28	30	30	31	32	31	29	30	29	28	27	24	22	22	22	31.9	23.4	
10-Jun	21	21	21	20	20	20	22	23	25	27	27	28	28	28	28	28	28	27	26	25	24	23	22	22	28.5	24.3	
11-Jun	21	21	21	21	21	22	24	26	28	29	22	20	21	20	20	21	22	23	22	20	19	18	18	18	28.6	21.5	
12-Jun	17	17	16	16	16	17	20	22	24	25	26	27	27	28	28	28	28	28	27	25	22	17	16	14	13	28.2	21.5
13-Jun	12	11	10	10	9	10	15	19	22	24	25	27	27	28	28	28	28	28	27	26	23	19	16	15	14	28.1	19.7
14-Jun	14	13	12	11	11	12	16	20	25	27	29	29	30	31	31	31	31	30	29	28	24	22	20	18	31.5	22.5	
15-Jun	17	16	15	14	14	15	19	23	25	28	30	31	32	33	33	32	32	32	32	30	28	26	22	22	32.9	24.7	
16-Jun	20	20	22	21	23	25	26	28	30	32	33	33	34	34	34	34	33	32	31	29	28	27	27	23	34.3	28.3	
17-Jun	21	20	19	19	19	20	21	23	25	27	29	30	31	31	32	31	32	31	30	28	27	26	26	25	32.2	25.9	
18-Jun	25	24	24	23	23	24	25	27	29	30	31	32	32	33	32	32	32	31	30	28	27	27	26	26	32.8	28.0	
19-Jun	25	25	24	24	23	23	23	26	27	29	31	31	31	32	32	32	32	31	29	28	27	25	24	24	32.4	27.7	
20-Jun	23	22	22	21	22	23	23	26	28	30	31	31	32	33	34	34	34	33	32	31	29	27	25	26	33.6	27.9	
21-Jun	23	21	20	19	19	21	25	27	29	30	31	31	29	29	29	29	28	27	25	23	22	22	22	22	30.9	25.7	
22-Jun	21	19	18	17	16	18	22	24	26	28	28	29	30	31	31	31	31	30	28	27	26	26	25	25	31.4	24.3	
23-Jun	16	15	15	14	14	15	18	24	27	28	30	31	32	33	33	33	33	32	31	28	26	23	20	21	32.9	24.4	
24-Jun	19	18	17	16	16	17	20	26	31	33	34	35	36	36	37	37	37	36	35	32	30	29	28	26	37.1	28.3	
25-Jun	24	22	22	21	21	23	26	29	31	32	33	33	34	34	34	34	33	33	31	30	28	26	25	23	34.0	27.8	
26-Jun	18	16	15	13	12	13	18	22	24	25	27	28	29	30	30	31	31	30	29	26	21	18	17	15	30.9	22.3	
27-Jun	14	14	13	12	11	13	19	24	26	28	32	34	36	37	38	38	38	37	35	31	29	29	26	24	38.3	26.6	
28-Jun	24	22	21	21	19	20	26	31	35	37	39	40	41	42	43	43	43	41	38	32	28	25	24	24	43.1	31.6	
29-Jun	24	22	22	21	21	21	25	31	35	37	38	39	39	41	41	42	41	40	38	34	32	31	29	27	41.8	32.0	
30-Jun	25	24	23	22	22	23	27	31	35	36	37	39	39	40	41	41	40	39	36	33	29	31	29	31	41.1	32.3	



Maximum Hour//Monthly Average	43.1
Total Hours In Month	720
Valid Hours	720
Percent Data Captured	100.0%

Meteorological Report
The Doe Run Company
Site Pressure

Site Name: Rivermines

Average Interval: 01 Hour

Units: mmHg

Sampling Frequency: 01 Second

Sum of Pres	Hour	24 Hour																										
		ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Avg
1-Jun	741	741	741	741	742	743	743	743	743	744	743	743	743	743	743	743	743	743	743	743	742	743	743	743	743	744	743	
2-Jun	743	743	743	743	743	744	744	744	744	743	743	742	742	741	741	740	740	740	740	741	741	741	742	742	742	744	742	
3-Jun	742	742	742	742	742	743	742	742	742	743	742	741	740	741	741	741	741	741	741	740	740	741	741	741	741	743	741	
4-Jun	741	740	740	740	741	741	741	741	741	740	740	740	739	739	738	738	738	738	738	739	739	740	741	741	741	741	740	
5-Jun	741	741	741	741	742	742	742	742	742	743	743	743	743	742	742	741	741	741	741	741	742	742	743	743	743	743	742	
6-Jun	743	743	743	744	744	744	744	745	745	745	745	745	745	744	744	744	744	744	744	745	745	745	746	746	746	746	744	744
7-Jun	748	746	746	747	747	747	747	747	747	747	747	747	747	748	746	746	745	745	745	745	745	746	746	746	746	747	746	748
8-Jun	746	746	746	747	747	747	747	747	747	747	747	747	747	746	746	745	745	745	745	743	743	743	744	744	744	744	747	745
9-Jun	743	743	743	743	744	744	744	744	744	743	743	742	742	741	741	741	741	741	741	741	741	741	742	742	742	744	744	742
10-Jun	742	741	742	742	742	742	742	742	742	742	742	742	742	742	742	741	741	741	741	741	741	741	742	742	742	742	742	742
11-Jun	741	741	741	741	742	742	742	742	742	742	742	742	743	743	743	741	741	742	743	742	743	743	744	744	744	744	744	742
12-Jun	744	744	745	745	745	745	746	746	747	747	747	747	747	746	746	746	745	745	746	746	747	747	747	747	747	747	747	748
13-Jun	747	747	747	747	748	748	748	748	747	747	747	747	746	746	746	746	745	745	745	744	744	745	745	745	745	745	748	746
14-Jun	745	745	745	745	745	745	746	746	746	746	746	746	746	745	745	745	745	745	744	744	744	743	743	744	744	746	745	745
15-Jun	744	745	745	745	745	746	745	745	745	745	745	745	745	744	744	744	744	744	744	744	744	744	745	745	745	745	746	745
16-Jun	745	745	745	745	745	746	746	746	747	747	747	747	746	746	745	745	745	745	744	744	744	744	745	745	745	745	747	745
17-Jun	745	745	745	744	744	744	744	745	745	744	744	743	743	743	742	742	741	741	741	741	741	741	741	741	741	741	745	743
18-Jun	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	741	742	742	743	743	741	741
19-Jun	743	743	743	743	743	743	744	744	744	744	744	744	745	745	745	744	744	744	743	744	744	744	744	745	745	745	744	744
20-Jun	745	745	745	745	745	745	746	746	746	746	746	746	746	745	745	745	744	744	744	744	744	744	744	744	745	746	745	745
21-Jun	745	745	744	745	745	745	745	745	745	745	744	744	744	744	744	744	744	744	743	743	744	744	745	745	745	745	744	744
22-Jun	745	745	745	745	745	745	745	745	746	745	745	745	745	744	744	743	743	743	743	743	743	744	744	744	744	746	744	744
23-Jun	744	744	744	744	744	745	745	745	745	745	744	744	744	743	743	742	742	743	743	744	744	744	744	744	745	745	744	744
24-Jun	744	744	744	744	744	744	744	744	744	744	744	744	744	744	743	743	742	741	741	741	742	742	742	742	742	742	743	743
25-Jun	742	742	742	742	742	742	742	742	742	742	742	742	742	742	742	741	741	741	741	741	742	742	743	743	743	743	742	742
26-Jun	743	743	743	743	743	744	744	744	744	744	744	744	744	744	743	743	743	742	742	742	742	742	743	743	743	743	743	743
27-Jun	743	743	743	743	743	743	743	744	744	744	744	744	744	743	743	742	742	742	742	742	742	742	743	742	742	745	743	743
28-Jun	743	743	743	743	743	743	743	743	744	744	743	743	743	743	743	742	742	742	742	742	742	742	743	743	743	744	743	743
29-Jun	743	743	743	743	743	743	743	744	744	744	743	743	743	743	742	742	741	741	740	740	740	740	740	740	740	740	744	742
30-Jun	740	740	741	741	741	742	742	742	742	742	741	741	741	741	740	740	740	740	740	741	741	741	741	741	742	741	743	741

	Maximum Hour//Monthly Average	748	743
	Total Hours In Month	720	720
	Valid Hours//Percent Data Captured	720	100.0%

Meteorological Report
The Doe Run Company
Precipitation

Site Name: Rivermlines

Average Interval: 01 Hour
Sampling Frequency: 01 Second

Sum of Rain	Hour	24 Hour																											
		ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max	Total	
1-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
2-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
3-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
4-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
5-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
6-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
7-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
8-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
9-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
10-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
11-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.44		
12-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
13-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
14-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
15-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
16-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.12		
17-Jun		0.16	0.13	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.30	0.30	
18-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
19-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
20-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
21-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
22-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
23-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
24-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
25-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
26-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
27-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	1.70	1.70	
28-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30-Jun		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
																									Maximum Hour//Monthly Total		1.70	2.56	
																									Total Hours in Month		720	720	
																									Valid Hours//Percent Data Captured		100.0%	100.0%	

